

INTERPLAY OF FORMS: CAST, CONSTRUCTED,
FORGED AS FUNCTIONAL JEWELRY

PROBLEM IN LIEU OF THESIS

Presented to the Graduate Council of the
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By

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PREFACE

I make what I make and, if it turns out to be something to wear, then it's called jewelry; if it turns out to be something else, it will be called something else.¹

Jewelry can be art to enhance the human proportion; it can stand by itself as small sculpture, or as body adornment.

My approach is what I consider to be a reinterpretation of the Bauhaus concept in combination with the classic Scandinavian jewelry, both of which appeal to my sense of balance between functional and aesthetic values.

The aspects of the Bauhaus that I have chosen to reinterpret concern several major premises. Form follows function, a phrase coined by Louis Sullivan, is an important factor in the construction and development of my pieces. Integrity of materials, inherent in the products and architecture of the Bauhaus period, is essential to my work. I treat metal as metal--its ductibility, fusibility and malleability as well as its reflective qualities. Structural elements, stressed in Bauhaus construction, are utilized to achieve strength. The voids and solids become equivalents in a finished piece.

The primary characteristics of classic Scandinavian jewelry are geometric variation and combination. Cylinders,

¹Arlene Fisch, "The Decade: Change and Continuity: A Round Table Discussion on April 4 About the Future and the Past," Craft Horizons, 36 (3), June, 1976, pp. 37-45.

globes, closed forms, biomorphic shapes and sinuous forged line reflect natural patterns of growth. The utilization of high polish combines with superb craftsmanship to produce jewelry of simplicity, direct, effective use of materials, clean unadorned form, pure structure and humanization of the technical aspects.

My series of sculpture for the hand utilizes qualities and techniques to which I respond. Each ring has clean, simple lines. The wrought metal allows me to manipulate the plastic characteristics of the metal and to optimize that feature in the object. The hollow forms give the rings a volume and shape which enhance the function, wearability and comfort. There is a sense of mass without weight. The organic shapes interact with the ring band which adapts to the finger and becomes an integral part of the design.

Physical size related to the human proportion fascinates me. My ideas of jewelry relate not only to physical, but visual and emotional responses. The slightly open forms add an air of mystery, a prod to the imagination, leaving something unsaid.

I am concerned with departing from the traditional barriers of the ring form. I have attempted to stretch both the band and attendant construction into a small sculpture for the hand. The sculpture wraps around the finger and becomes a ring; thus, function and decorative qualities are not separate. The form is the adornment.

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CHAPTER I

ORIGIN OF STUDY

I have been experimenting with metalsmithing techniques: forging, construction and casting have all been explored. The control and strength of design through pattern exploration in construction produces clean, functional design. Forging techniques enhance the possibilities to move metal into fluid, functional shapes with surface enhancement and add a dimension to my work not achieved through other methods. The relationship of these two techniques, forging and construction, to Scandinavian-designed jewelry and to metalwork, and my exposure to applied art and the Bauhaus experiment relate in a personal way to my concepts of body adornment. Casting, as another technique, allows the option to add frivolous expression and a lyrical quality to my work. Thus, my interest is to combine the three techniques, construction, forging and casting, into functional silver objects.

Problem

This study involves investigating the combination of delicately cast forms, domed shapes and forged silver into an aesthetic form of jewelry.

The specific questions considered were as follows:

- 1) Can the sequential interplay of forms be inter-related from initiation to completion of the study?
- 2) Can the techniques contrast with one another?
- 3) Can the scale of the forms be varied?
- 4) Can the three techniques of construction create body adornment?
- 5) Can these forms individually or in a combined grouping make a personal statement?

Methodology

The completed series of twenty ring forms deals primarily with two techniques in combination: forging and construction; however, the early pieces combined three techniques in each piece. As the series evolved, the casting techniques were eliminated as superfluous in making a unified, holistic personal statement. The forms are constructed of sterling silver combined with stones, found objects, crystals, red brass and the use of patinas. The data was collected in a series of sketches and drawings with technical notations and visual observations as the work progressed. Based on the data collected and visual findings on the constructed pieces, I have analyzed the combined processes and visual observations in a written discussion of the series.

CHAPTER II

DESCRIPTION OF THE WORK AND THE WORK PROCESSES

The completed series of twenty rings will be grouped into mini-series for purposes of analysis and discussion. The description of each group will be followed by short answers to the questions posed in the initial statement of the problem.

Mini-Series I

The first series of rings were designed with a minimum of forging in the ring bands. The metal is one half round 10 gauge silver, forged with the weight balance at the base of the ring band, slightly tapered at the top. Affixed to the top of the ring band is a silver tube-connector that supports a dome shape.

The first dome shapes were disks sawed from 20 gauge sheet silver, dapped to varying degrees of depth and used individually, combined with cast forms. They are inverted, umbrella-shaped sections, poised on tube bases and soldered to the ring band.

The next development of the domes combined two dapped disks soldered at one point, open in clam shell fashion, soldered onto the connecting tube and to the ring band. The repeating shapes of the domes and the attendant round ring

shape is aesthetically pleasing in relating shapes; the rounded inner shape of the band, contouring to the finger is functionally satisfying. The weighted forging makes the balance very stable.

The open shapes, using dapped one-half domes, were varied to include sliced, pierced, silver circles holding ball hematites in a tension setting, patina interiors, piercing to evolve a spiral, set with a cabachon garnet and a reticulated silver insert. The bands remain circular in shape, retaining the simple forged inner rounded, weighted contour.

An experiment leading to closed forms began with riveting two dapped disks with collars into a movable unit opening to reveal inner design units that repeat the design motifs in the collars. This ring demanded a subtle visual connection between the band and the top of the form, other than a tube-connector. A small dapped half circle, horizontally pierced, supports the mechanical dome shape.

The design for these rings began with the domed sections, and the forged band was constructed to relate to the upper shape.

Answers to Specific Questions

The interplay of forms in the initial series of domed shapes related the band shape to the domed shapes. The two separate elements are connected physically and visually with a tube connection.

The shapes are contrasted by forged elements that move the eye from the band through the upward thrust of the tube-connector into the slick, almost machine-like, domed elements. The flowing linear quality of the band contrasts with the swelled domes; however, the two separate elements remain single units fused by the tube-connector into a functioning ring.

The scale of the forms in these early pieces vary only slightly. Variations in scale seemed, at the time, to be limited to the functional wearability and balance of the two sections. The coupling height of the connectors gave some optical illusion of scale differences.

Almost from the onset of the problem, the need to eliminate the cast forms became obvious. They became obsolete from a design sense, although in many ways, it might have been technically easier to insert and utilize cast units in the open dome shapes. Cast elements were incompatible with clean, simple lines and confused the contrast in forms required to make a strong statement.

The mini-series of rings together make a personal statement. The individual forms in the series were not strong enough, by themselves, to make that statement.

Mini-Series II

The second series of rings is concerned with closed forms in the upper half of the ring while the forged bands

support the closed structure. The domed shapes demanded to be exploited, by stretching their edges, and by expanding the middle section into closed ovoids and expanding the forged elements in the bands. The closed form with a blue stone is a variation of an earlier ring (Fig. 9, p. 24); however, the forged band expands into a flowing flame-like shape rising to the dome. The tube connector almost disappears. The band is not perfectly round and is functionally and visually satisfactory for fit and balance. Flattened and expanded edges on the ring (Fig. 10-A, p. 25; 10-B, p. 26) lower the profile of the closed unit and the band swells more at the base while an angular, curled riser enfolds the tube-connector. The rakish angle of the dome gives greater movement and a less sterile appearance to the total form.

The onion dome experimentation (Fig. 11, p. 27) with a closed unit was visually and technically awkward. The structure was stiff and did not lend itself to the vitality of design I was attempting to achieve.

Answers to Specific Questions

The total effect in these ring forms is more unified than the previous endeavors, which essentially are two separate sections tube-connected into a ring.

The closed form series still deals with two separate elements, visually and physically related to each other by material, swelling domes, elongated ovoid shapes (Fig. 7, p. 22)

and the use of consistent high polish with little variation in texture or coloration.

The scale of the shapes was varied to a greater extent in this mini-series of closed forms than in the previous ones. The relationship of top and bottom has become more fluid in these pieces (Fig. 9, p. 24) than the earlier rings and gives visually the illusion of scale variation.

I was able to combine forging techniques and construction into a total visual statement that functions well and is unified. The individual parts interrelate to each other and are less antiseptic and geometric than in the initial series.

The pieces in this grouping have a stronger individual sense of statement than those previously constructed. Each makes a personal statement. As a group they are less cohesive, but demonstrate a development that directs the viewer to an evolution of form from two separate design elements to a unity with emphasis on the sculptural quality of the forged bands.

Pod Series III

In these forms the original dome shape has evolved into a stylized pod shape. The rigid, geometric, circular disk has been elongated and becomes an organic outgrowth of the circle. The tapered forged band flows from the pod onto the finger in a tendril-like fashion (Fig. 19, p. 36). The connector-tube is eliminated as the shapes evolve into a

unified whole. The closed forged ring band is contoured to the shape of the finger and the base-weighted band gives balance and function. The earliest pods were developed separately from the forged band, but subsequently the bands and pods were designed concurrently with each other. The fluid organic shapes resulted in the elimination of a closed ring band. The forms flow into a unified design totality. This design conforms to the shape of the finger and clings like a vine.

Answers to Specific Questions

I related the interplay of forms in a sensual, undulating manner. One shape flows into the other in a continuum of flow which reverses itself. The organic pod units related without interruption to the undulating forged ring bands in most instances.

I contrasted the forms by combining delicately constructed swelling domes with solidly forged linear band units.

The scale of the forms in the pod series is varied. The size and curvature of the construction related to the forged sculptural base.

The combination of constructed units and forged ring bands has evolved from a technically crafted object into an intimated vital totality.

I believe that each pod ring can stand along, individually, as a personal statement. In a group the personal

closed forged ring band is contoured to the shape of the finger and the base-weighted band gives balance and function. The earliest pods were developed separately from the forged band, but subsequently the bands and pods were designed concurrently with each other. The fluid organic shapes resulted in the elimination of a closed ring band. The forms flow into a unified design totality. This design conforms to the shape of the finger and clings like a vine.

Answers to Specific Questions

I have related the interplay of forms in a sensual, undulating manner. One shape flows into the other in a continuum of flow which reverses itself. The organic pod units related without interruption to the undulating forged ring bands in most instances.

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The combination of constructed units and forged ring bands has evolved from a technically crafted object into an intimate vital totality.

I believe that each pod ring can stand alone, individually, as a personal statement. In a group the personal

statement becomes stronger. Because of the variations in scale and visual organic growth, the series becomes an almost living evolution of my personal statement.

Series IV

The last two rings in my series, I feel, are the most successful. They combine the techniques of forging and construction in an almost indiscernable combination. They are small sculptures, functionally designed for the human hand, visually independent of that function. Each curve and shape interrelates to contribute to a visually pleasing sculptural form.

Answers to Specific Questions

The early pieces were interrelated but often interrupted by awkward transitions. The transitions in line, shape and texture are imperceptible in the last two rings. The fluid lines of the silver forging and construction combine into a unified whole.

The contrast of forms in the last two rings are subtle. Each shape related to the other--one delicate and thin--contrasted to the forged, thickened linear quality of the base which repeats the rounded shape to a finial where it surrounds the round constructed pod unit.

The scale of each section is continuously adapted to the human proportion for which it is designed. The scale of

these rings is more delicate and linear than any previous ring sculptures produced in the series.

The unification of construction and forging in the last two pieces of the series makes a statement, both functionally and visually--an intimate melding of techniques.

Each of these sculptures alone make a strong personal statement; and, as a culmination of the entire evolutionary group, I feel that together they solve the problem originally posed.

CHAPTER III

SUMMARY AND CONCLUSION

An extensive series of small sculptures to wear on the hand was developed as a means to demonstrate control and strength of design through the experimental combination of the techniques of casting, forging and construction. The merging of techniques to make functional silver objects began with circular pattern designs, expanded into swelling shapes (domes) and forged, weighted ring bands. The techniques lend themselves to clean, simple, functional shapes.

Visually, the early rings were well crafted, rather formal and sterile in appearance. The cast elements gave the illusion of frivolity; however, the appearance and function of the rings remained antiseptic and did not satisfy my need in making a personal statement about body adornment.

The decision to eliminate the casting was made because the technique seemed to be extraneous to creating functional body adornment.

The initial geometric structures evolved into sculptural, fluid shapes through several stages. The first stage involved the expansion and development of forging techniques in order to elaborate on the visual as well as the functional aspects of the ring band itself. As this stage evolved, the need for

a transitional connecting element (the connector-tube) appeared unnecessary. The eventual elimination of this element coordinated the two elements into a single unit, organic in nature.

As the forged band element became stronger and more forceful, it was apparent that the formal geometric dome had to be adjusted in order to interrelate both elements. This stage involved experimentation with the manipulation of the geometric volume and the shape of the several forms until a unifying relationship resulted.

The drawings were a useful outlet for ideas and served as a method of observation of natural objects: the sorting out and developing of those ideas. I draw in line and flat tones with the sculptural three dimensional idea of the form in my mind. The adjustments necessary to translate these ideas into sculptural dimensions were governed by my ability to manipulate the materials and the techniques in creating the end result.

The organic pod shapes allowed me to explore universal shapes in full form extant. Varying the sizes of the sections, with openings, allowed me to create more shape interest than the closed units previously completed. The openings made the elements three dimensional and permitted greater variety in spatial relationships, both with the pod form itself and the forged band. Thus, I could deal with the mass, its weight and volume as well as the space in air that it displaces. It

was possible to relate and combine all of these factors, including sections of varying size, component parts and directional changes, into one organic whole. While the shapes, sizes, patterns and type of construction varied, a commonality of feeling emerged.

In the future I intend to continue my exploration of forms in new and varying ways. I intend to explore the adornment of the human body. Expansion of the ideas I have explored for the hand extend to other parts of the body and will permit me to vary the relationships further.

FIGURES



Figure 1



Figure 2



Figure 2

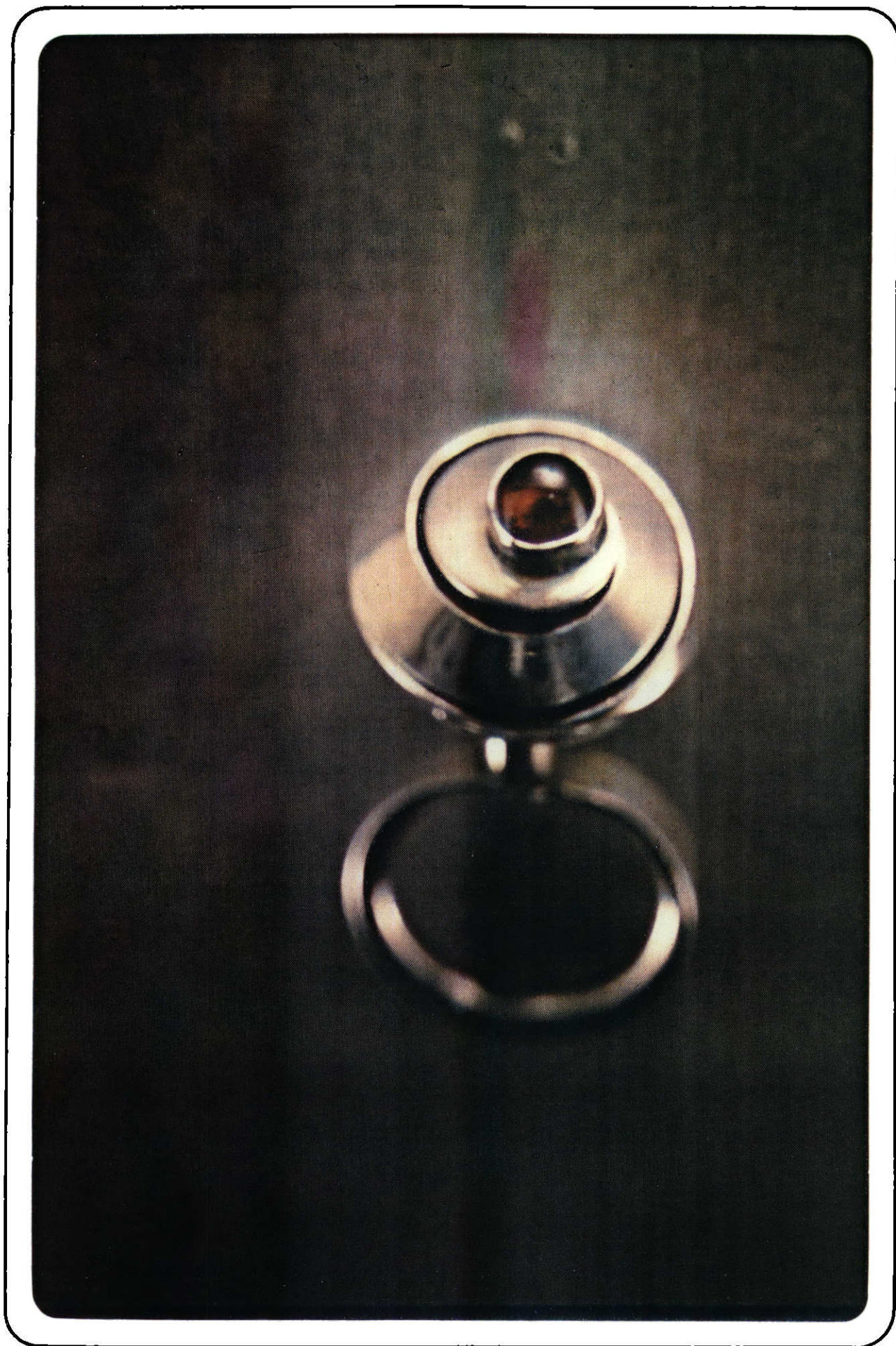


Figure 3



Figure 3



Figure 4



Figure 4

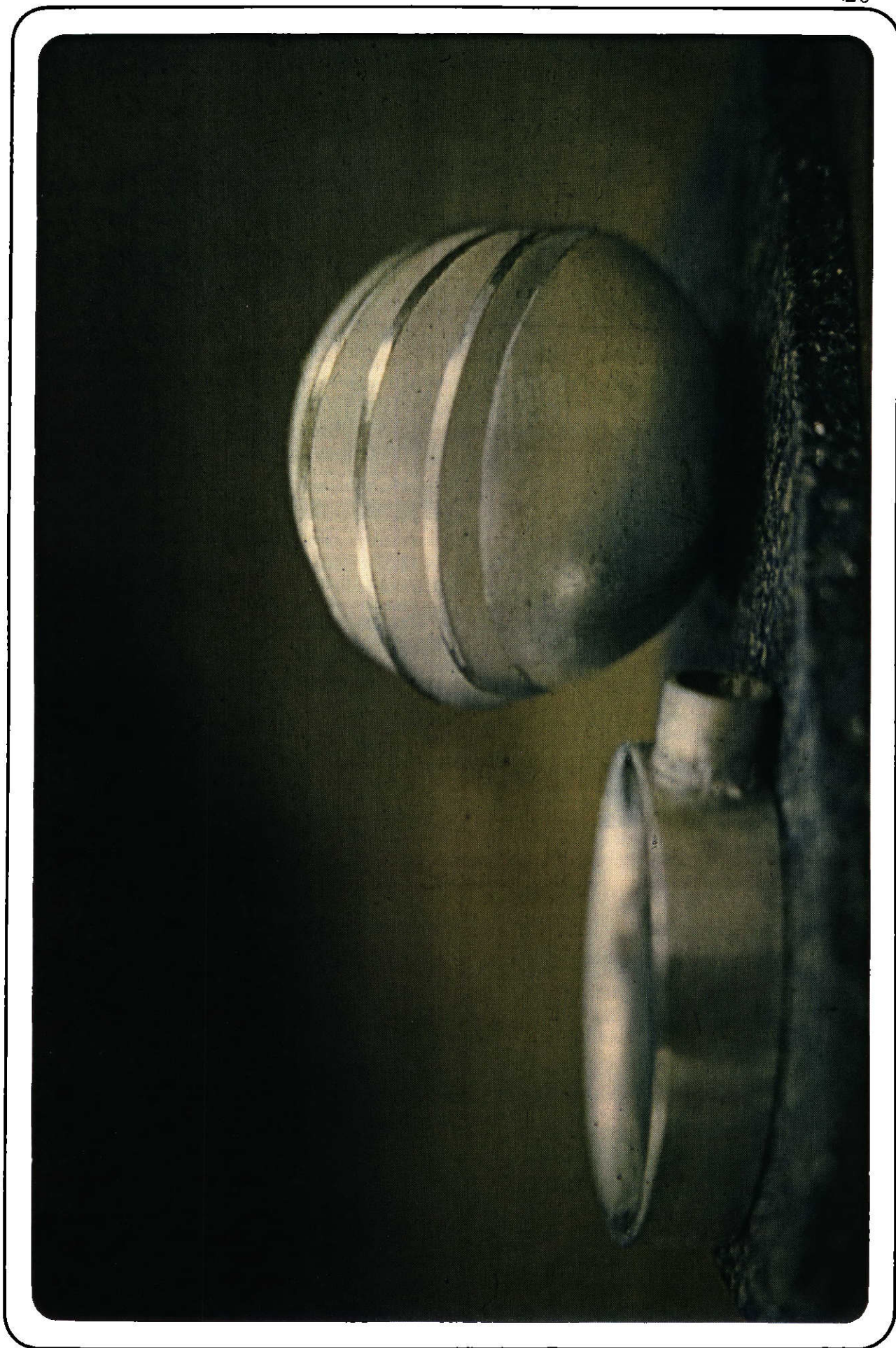


Figure 5-A

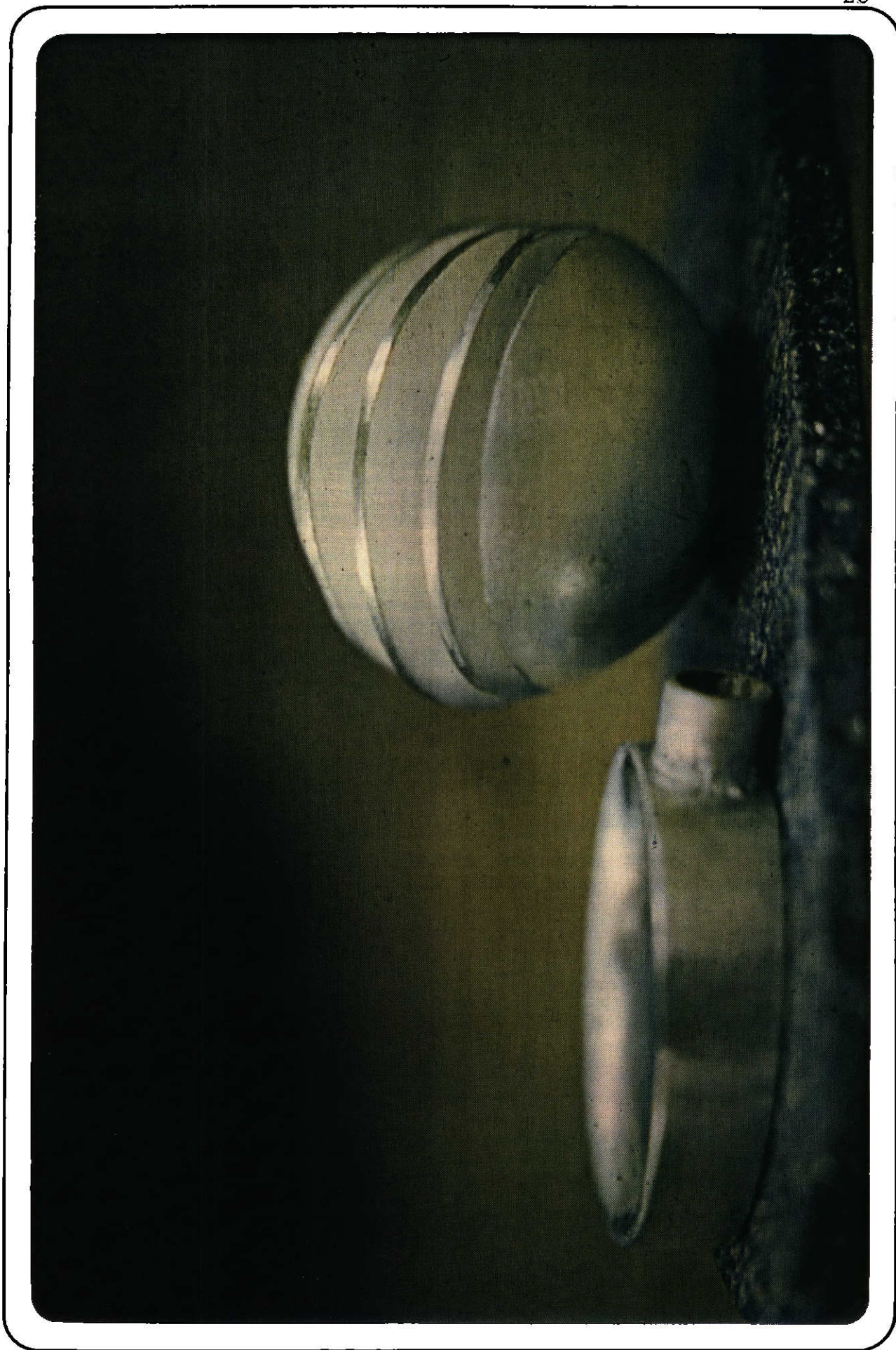


Figure 5-A



Figure 5-B



Figure 5-B



Figure 6



Figure 6

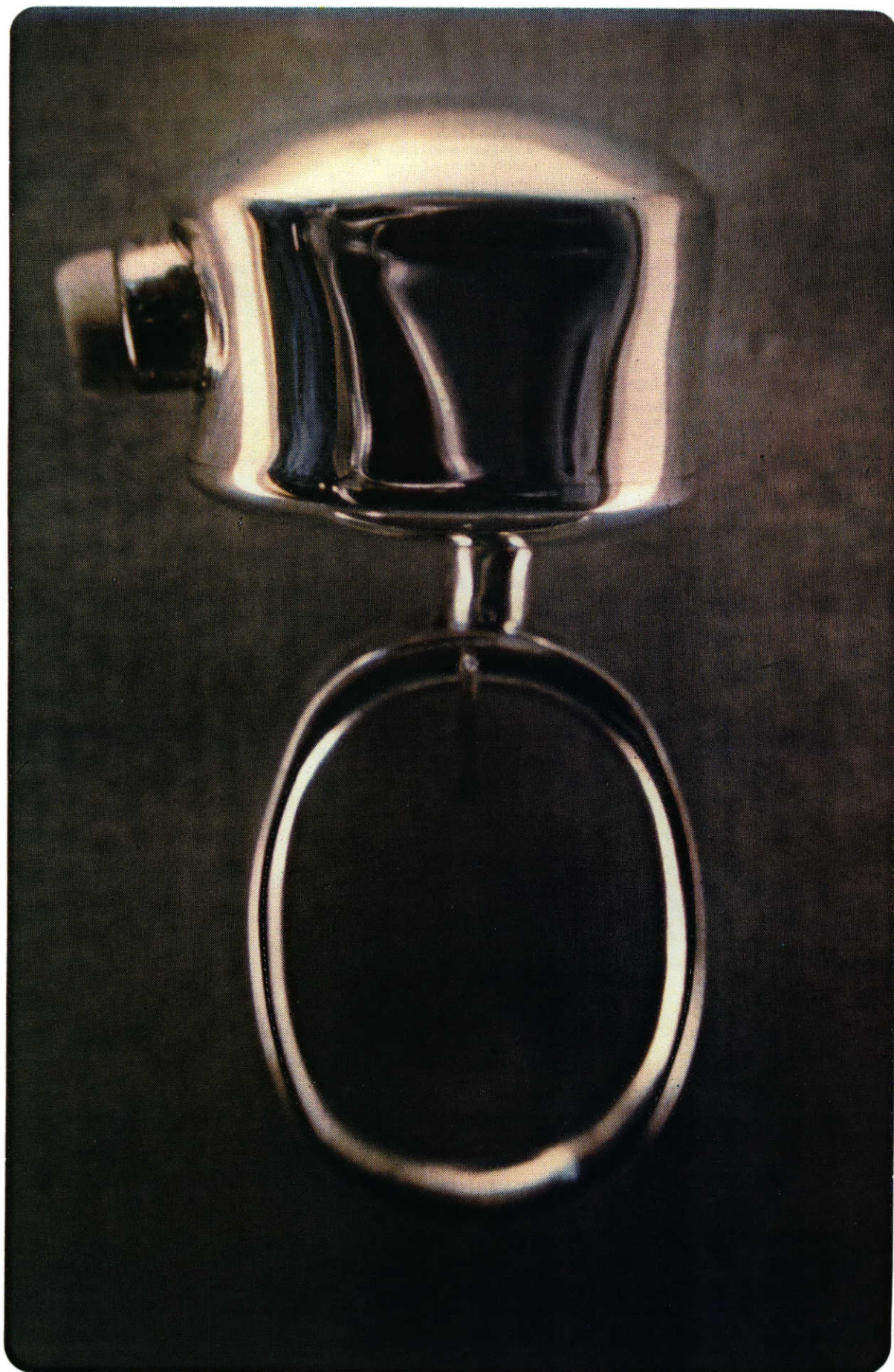


Figure 7



Figure 7



Figure 8



Figure 8

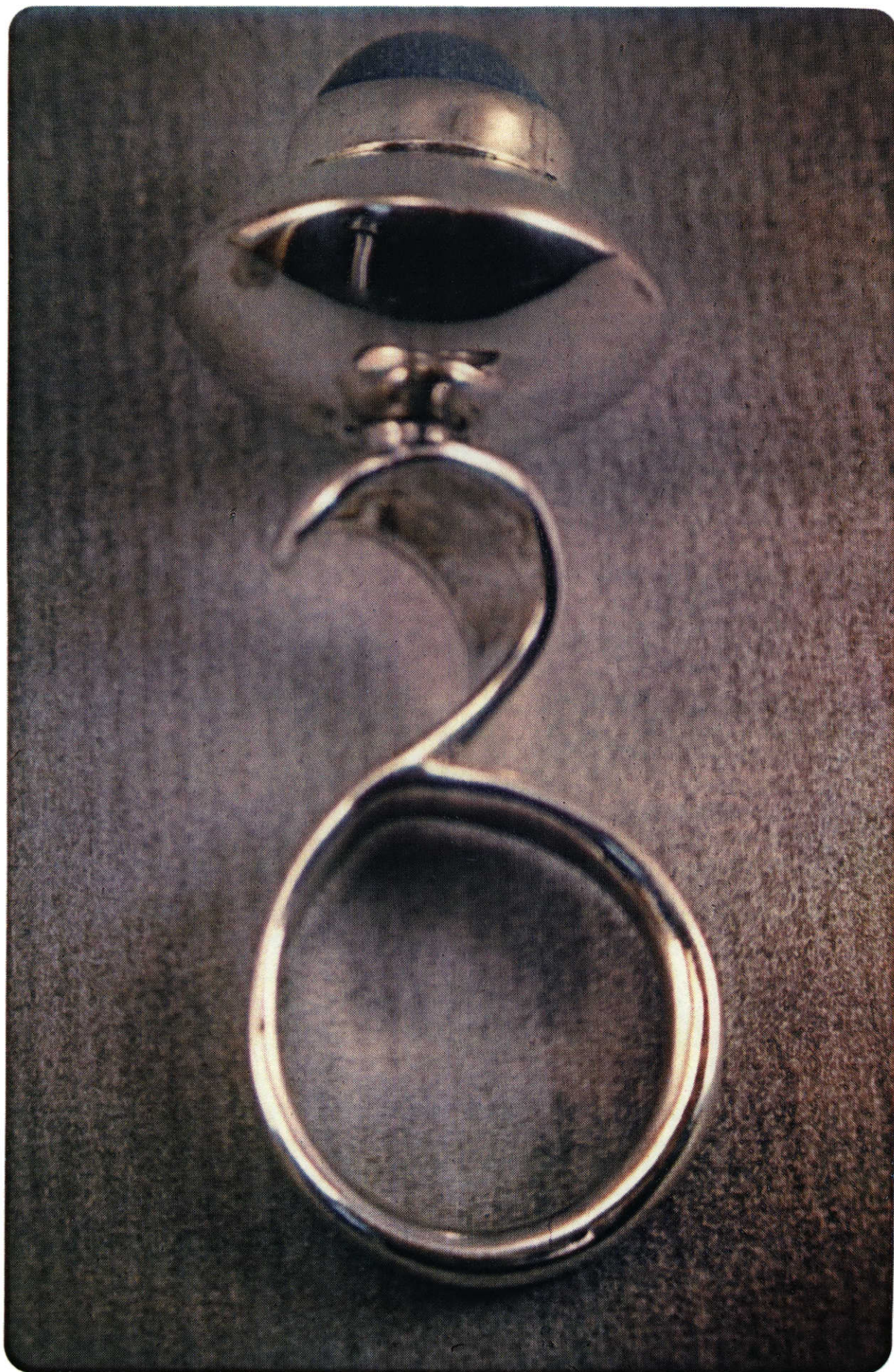


Figure 9

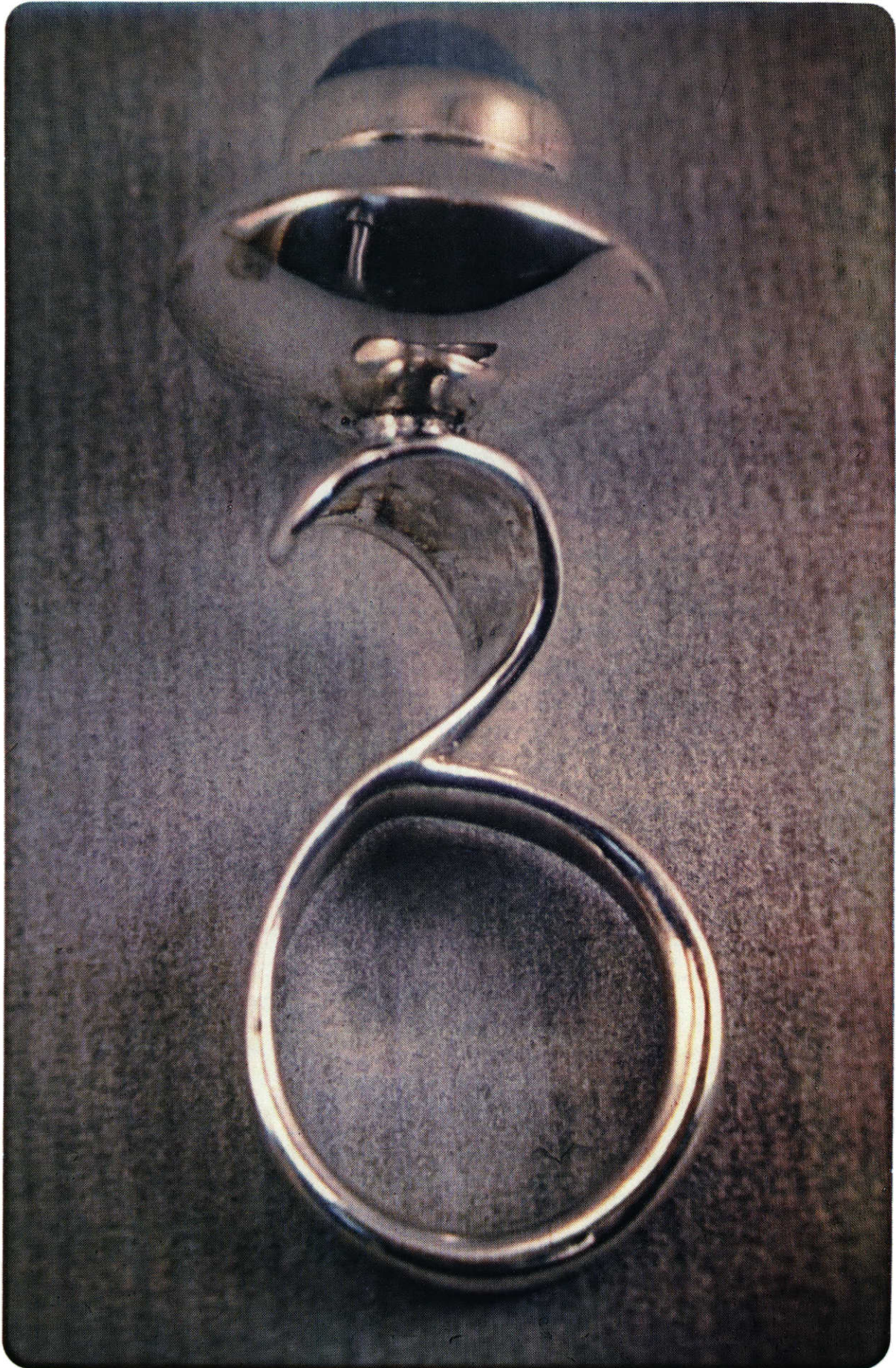


Figure 9

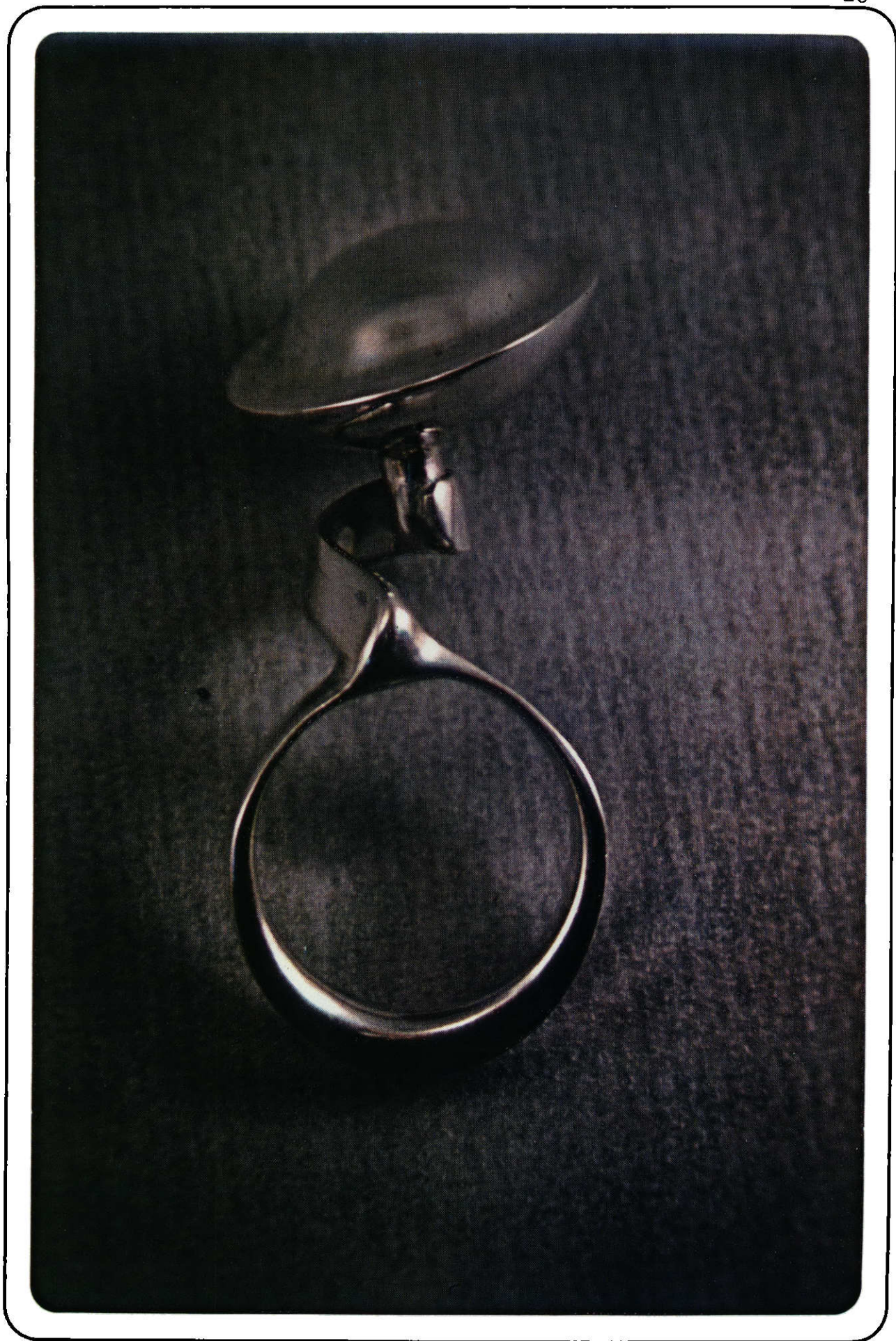


Figure 10-A

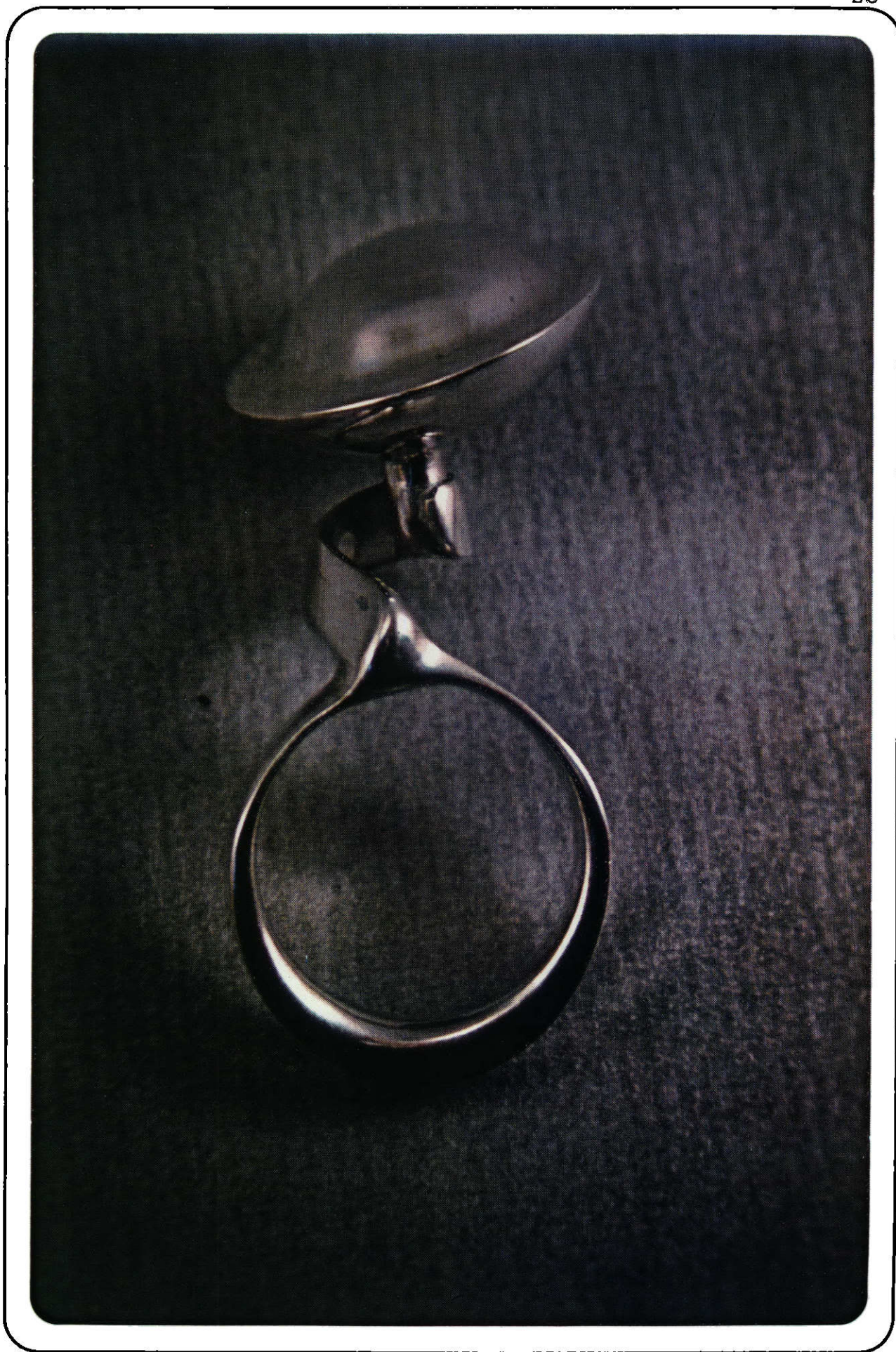


Figure 10-A

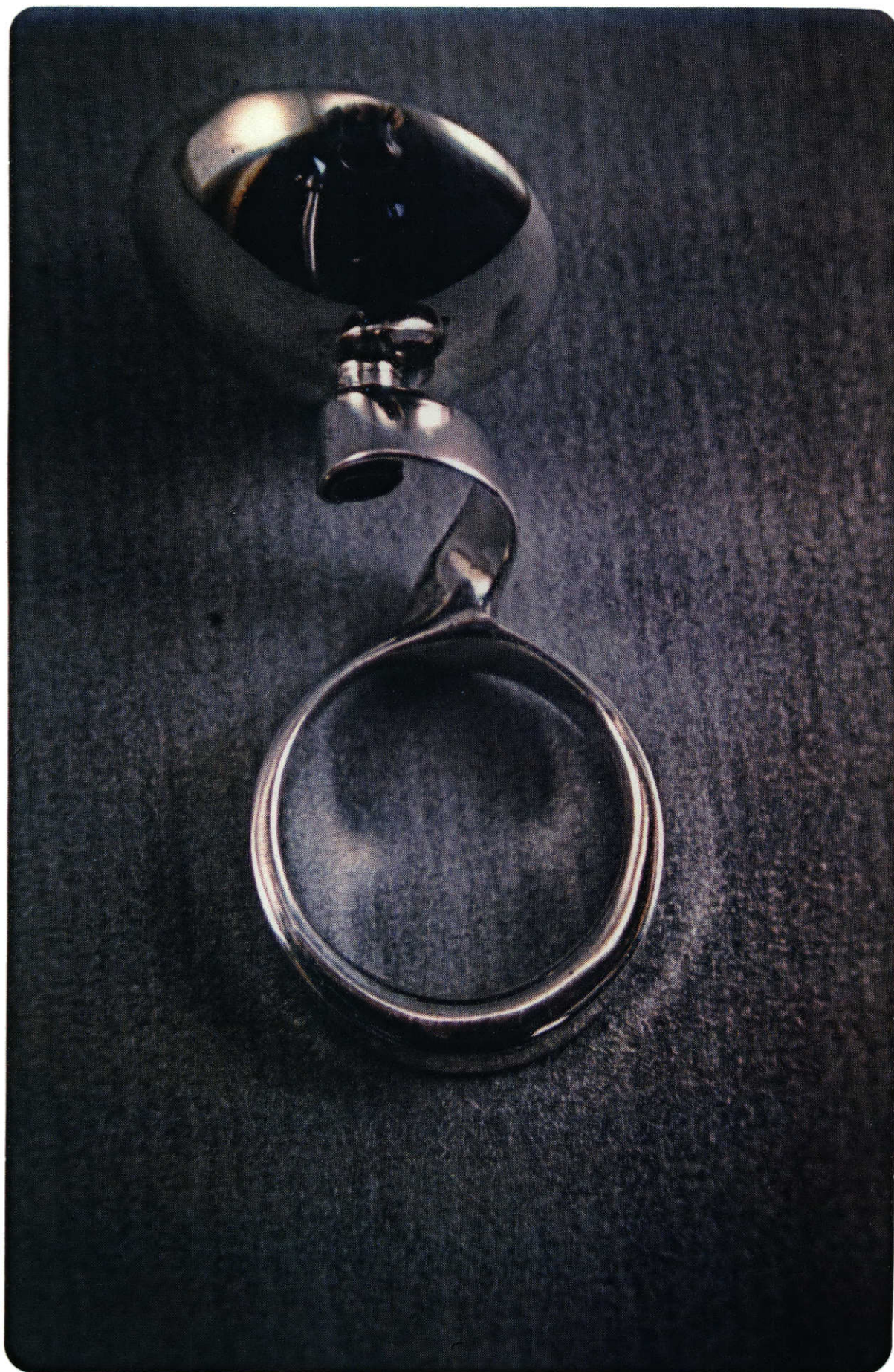


Figure 10-B

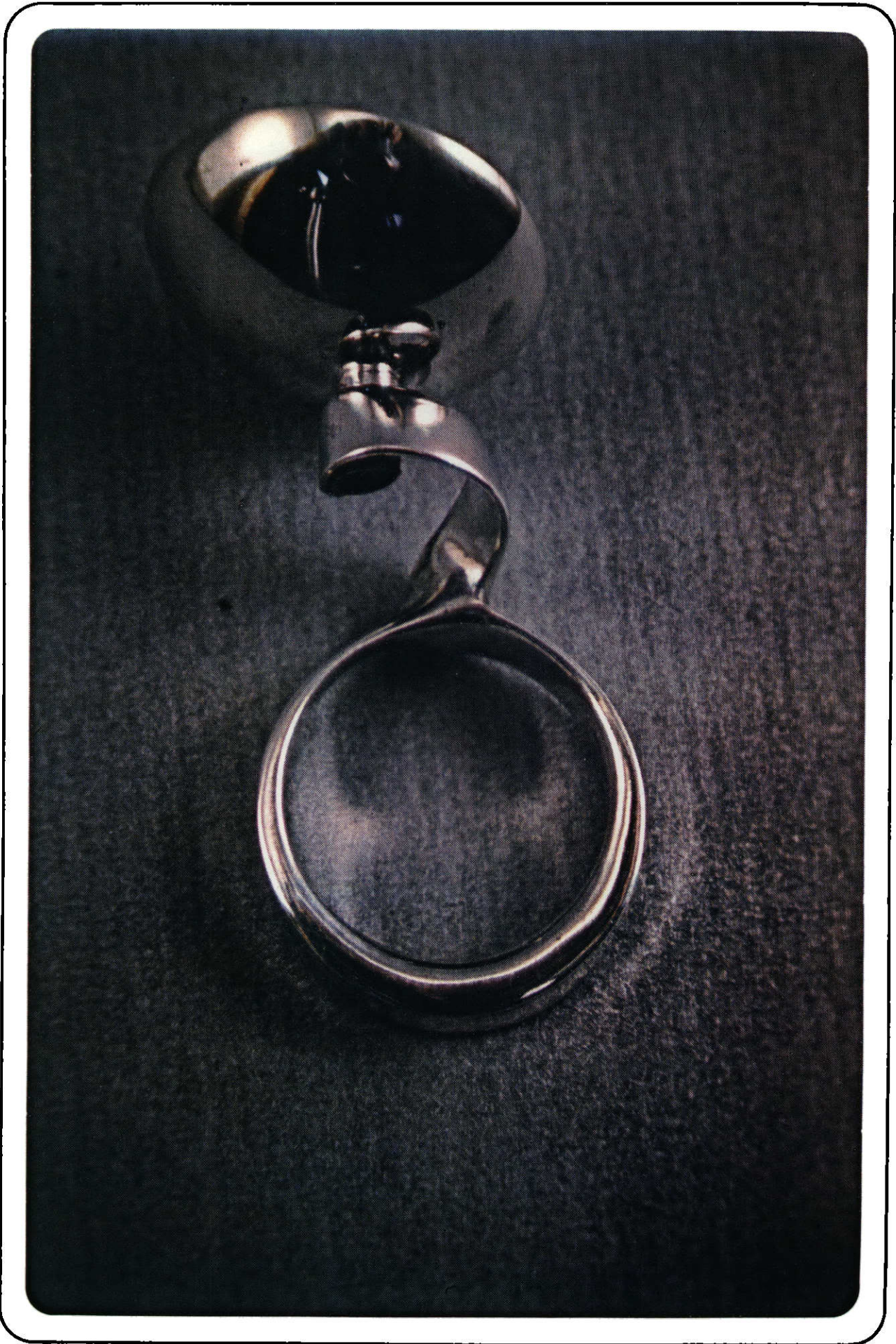


Figure 10-B



Figure 11

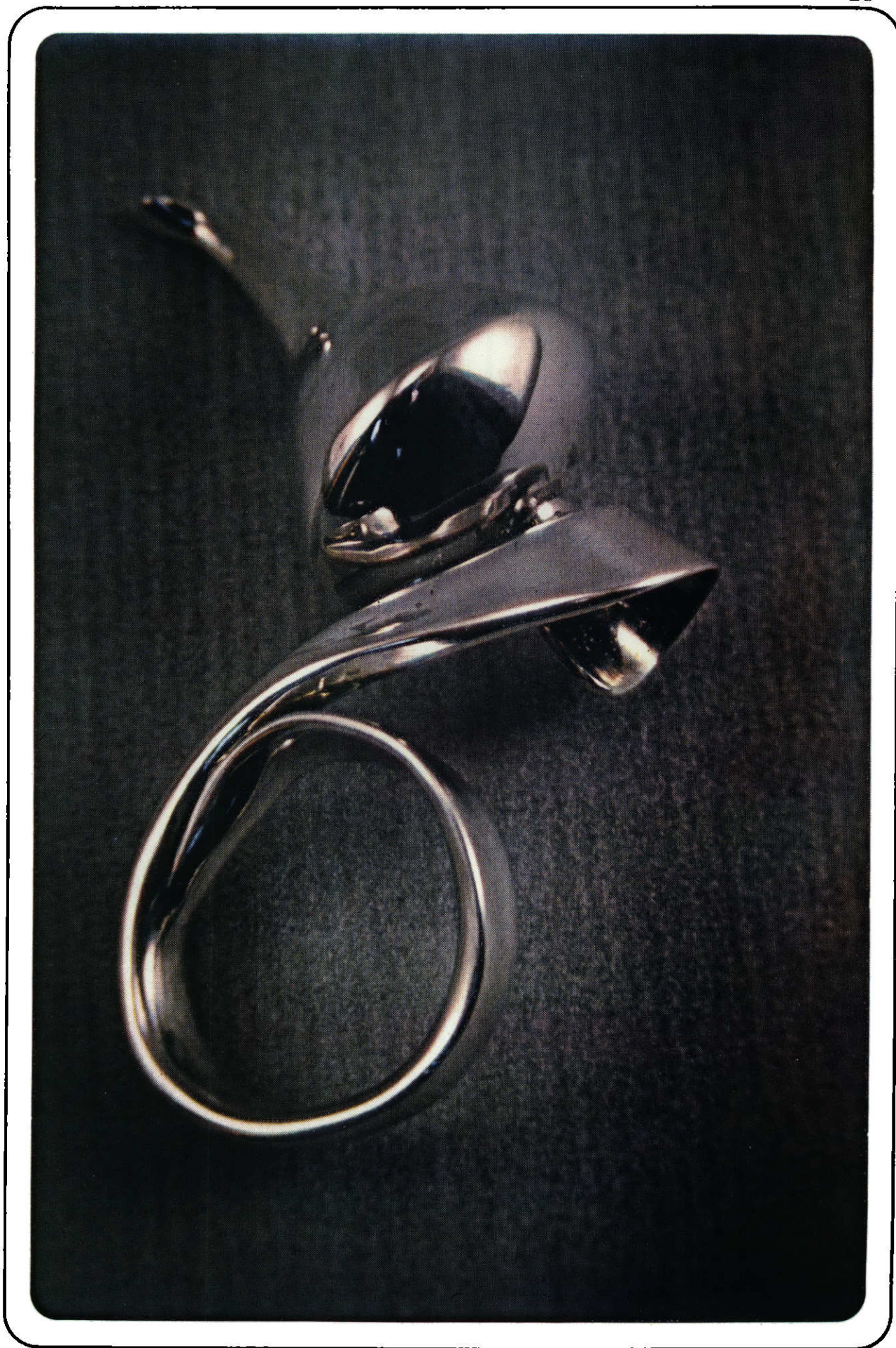


Figure 11



Figure 12



Figure 12



Figure 13

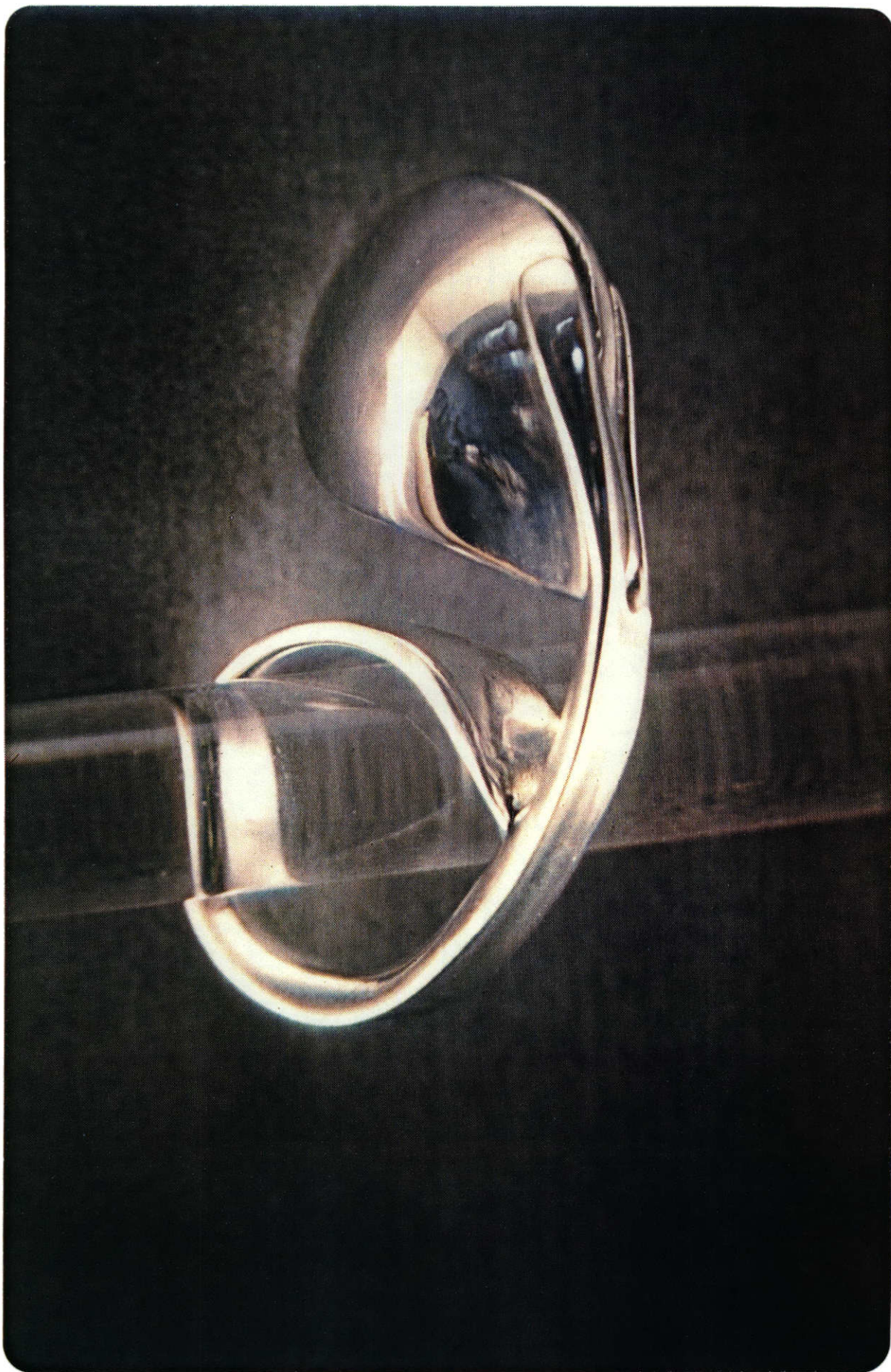


Figure 13



Figure 14



Figure 14

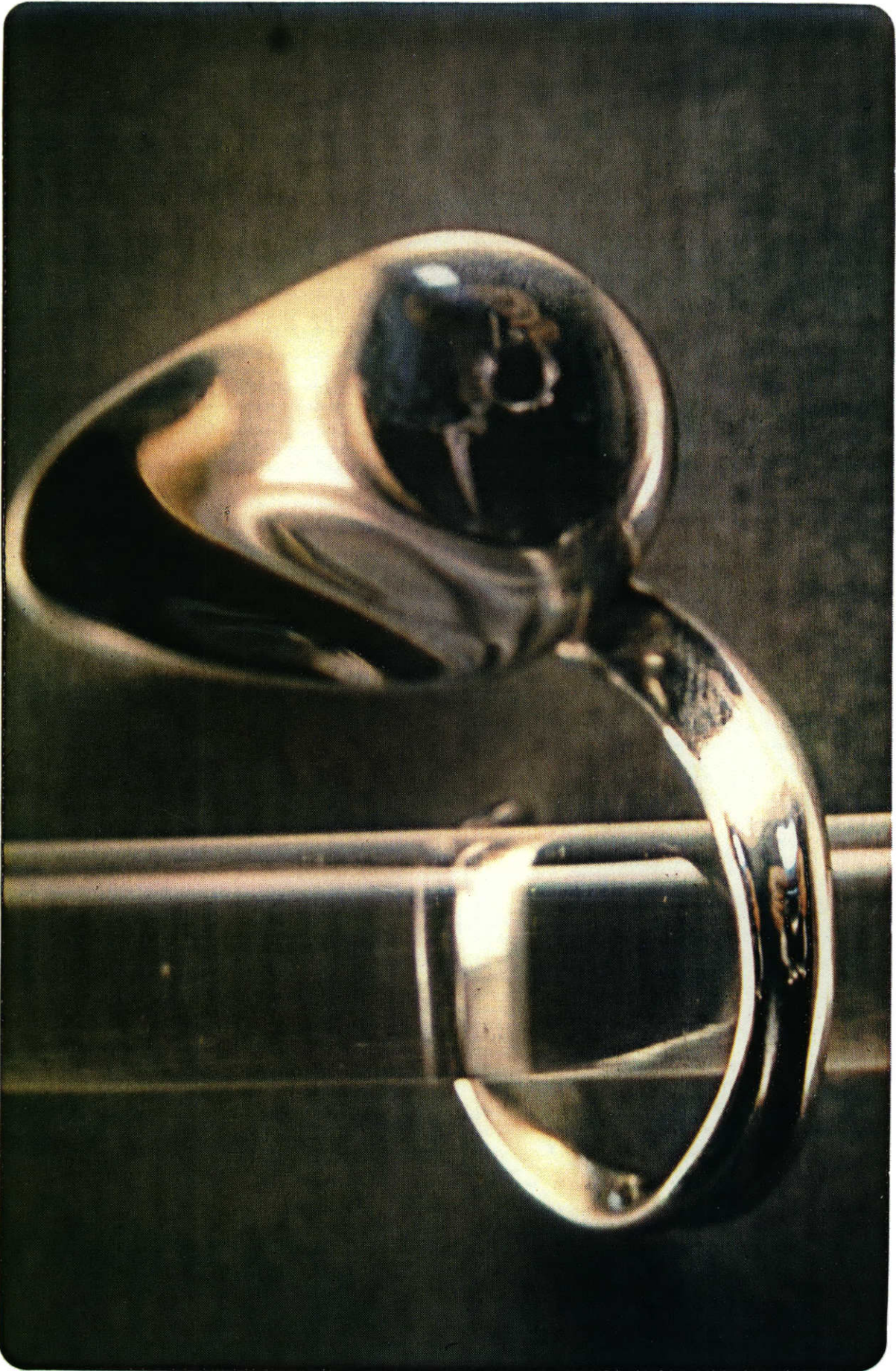


Figure 15

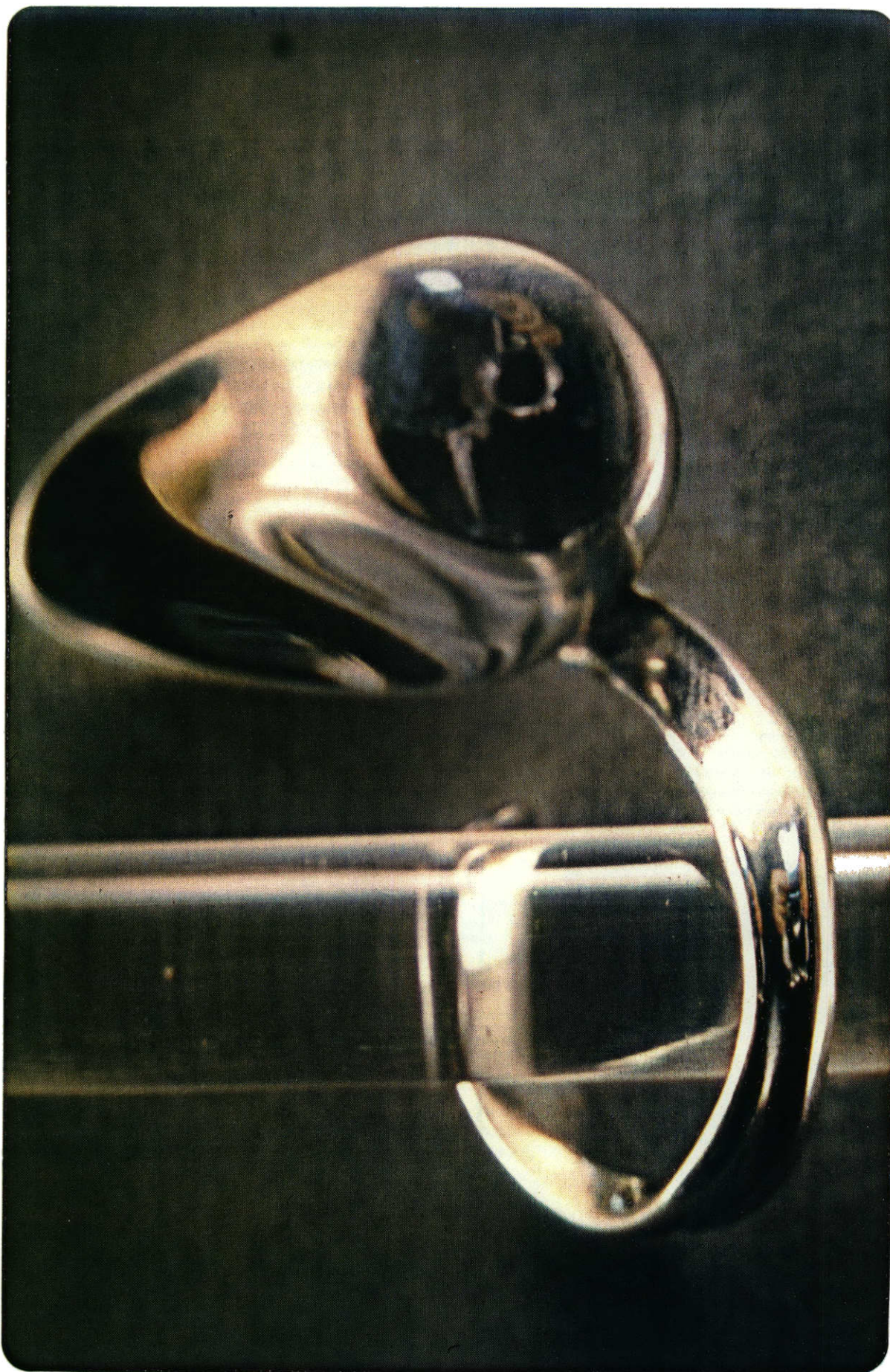


Figure 15



Figure 16



Figure 16



Figure 17-A



Figure 17-A

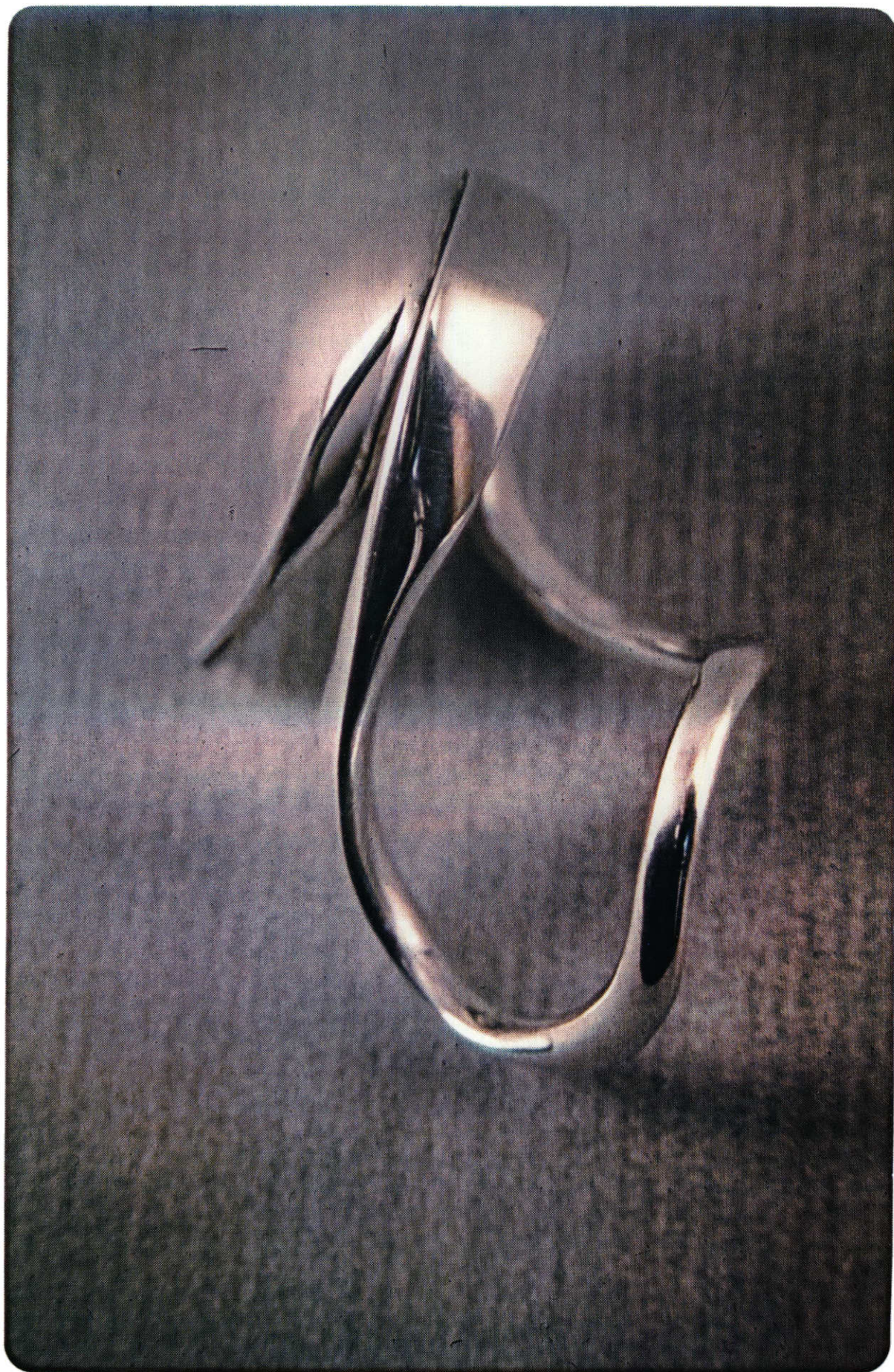


Figure 17-B

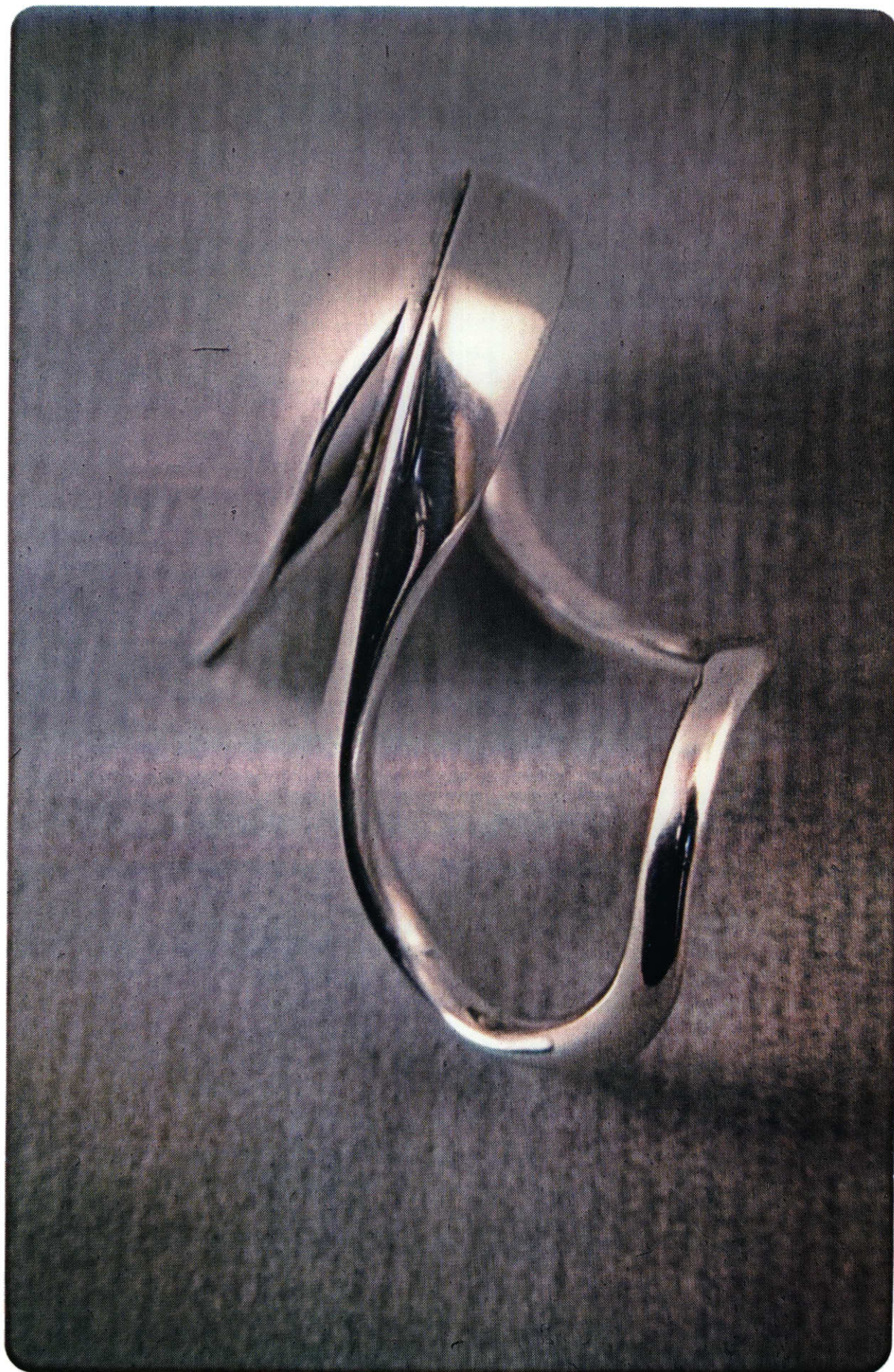


Figure 17-B

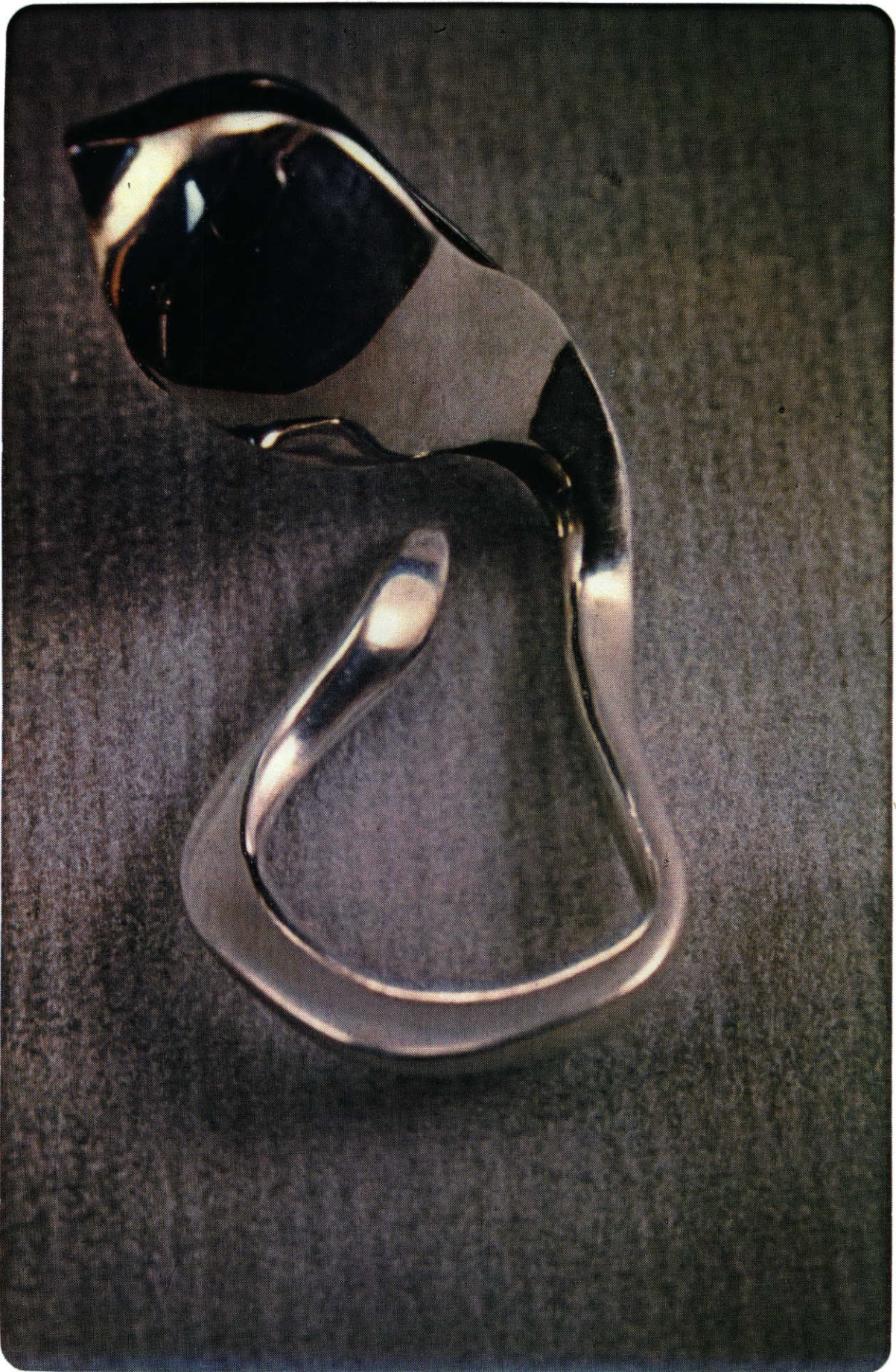


Figure 18

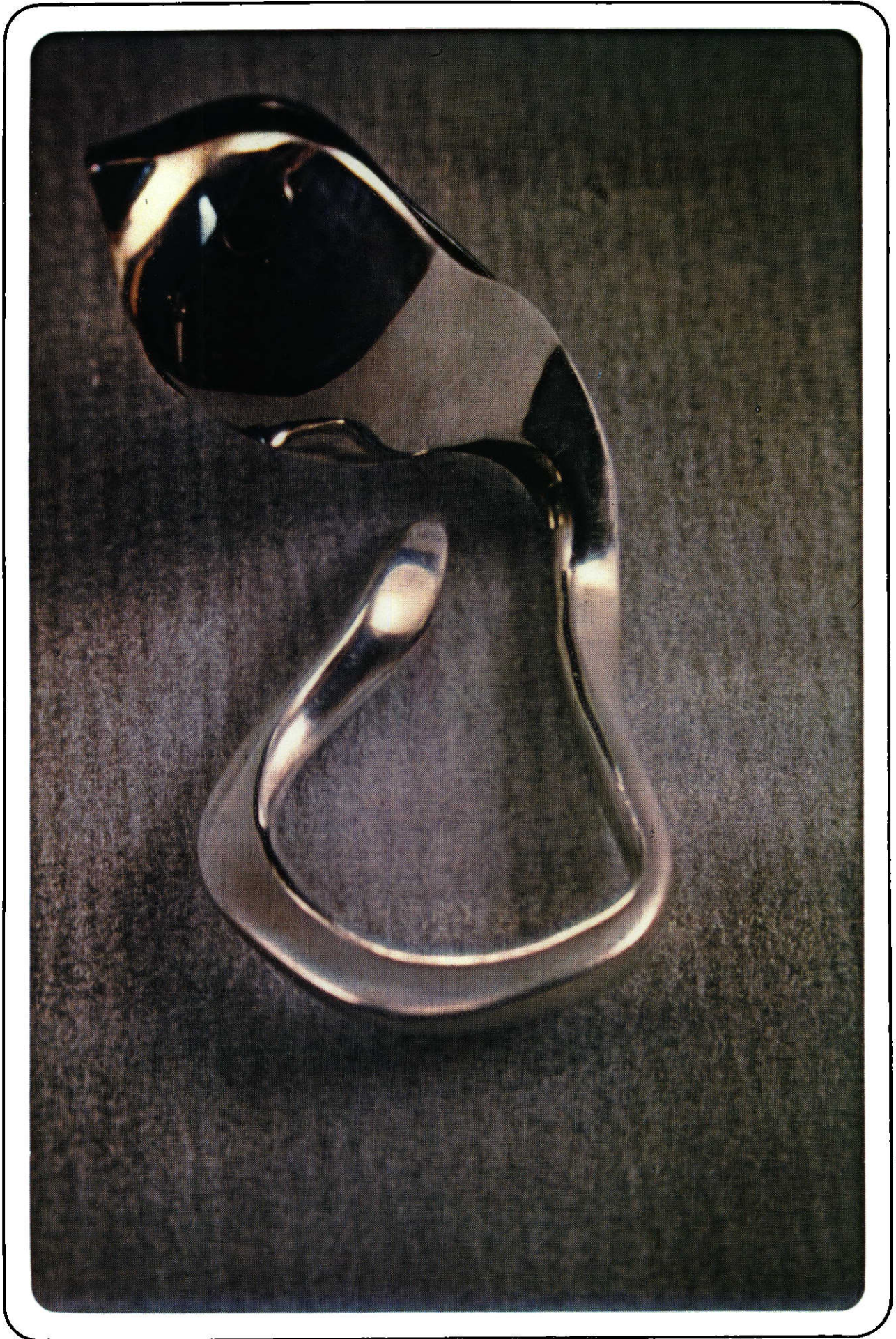


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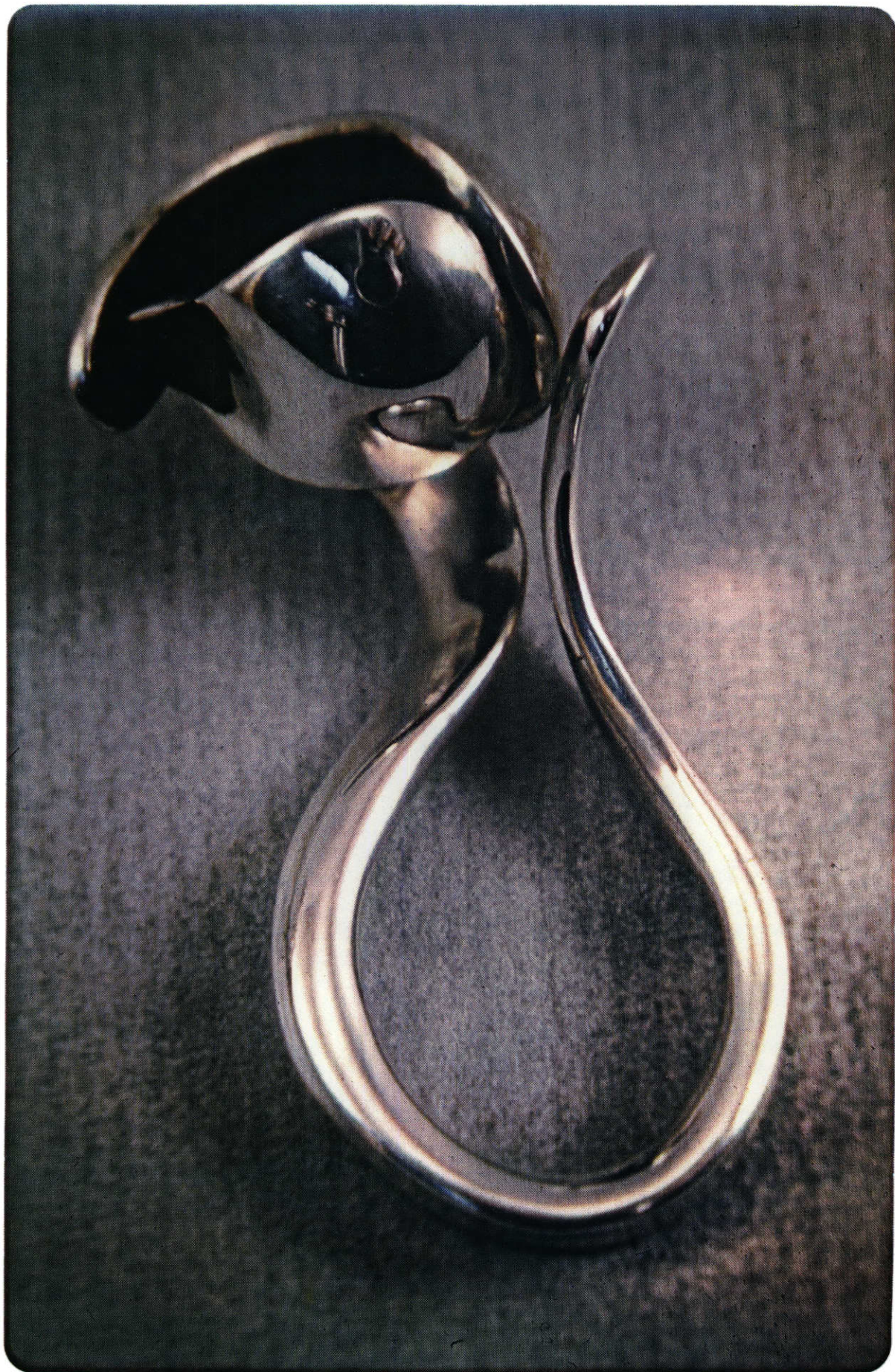


Figure 19



Figure 19

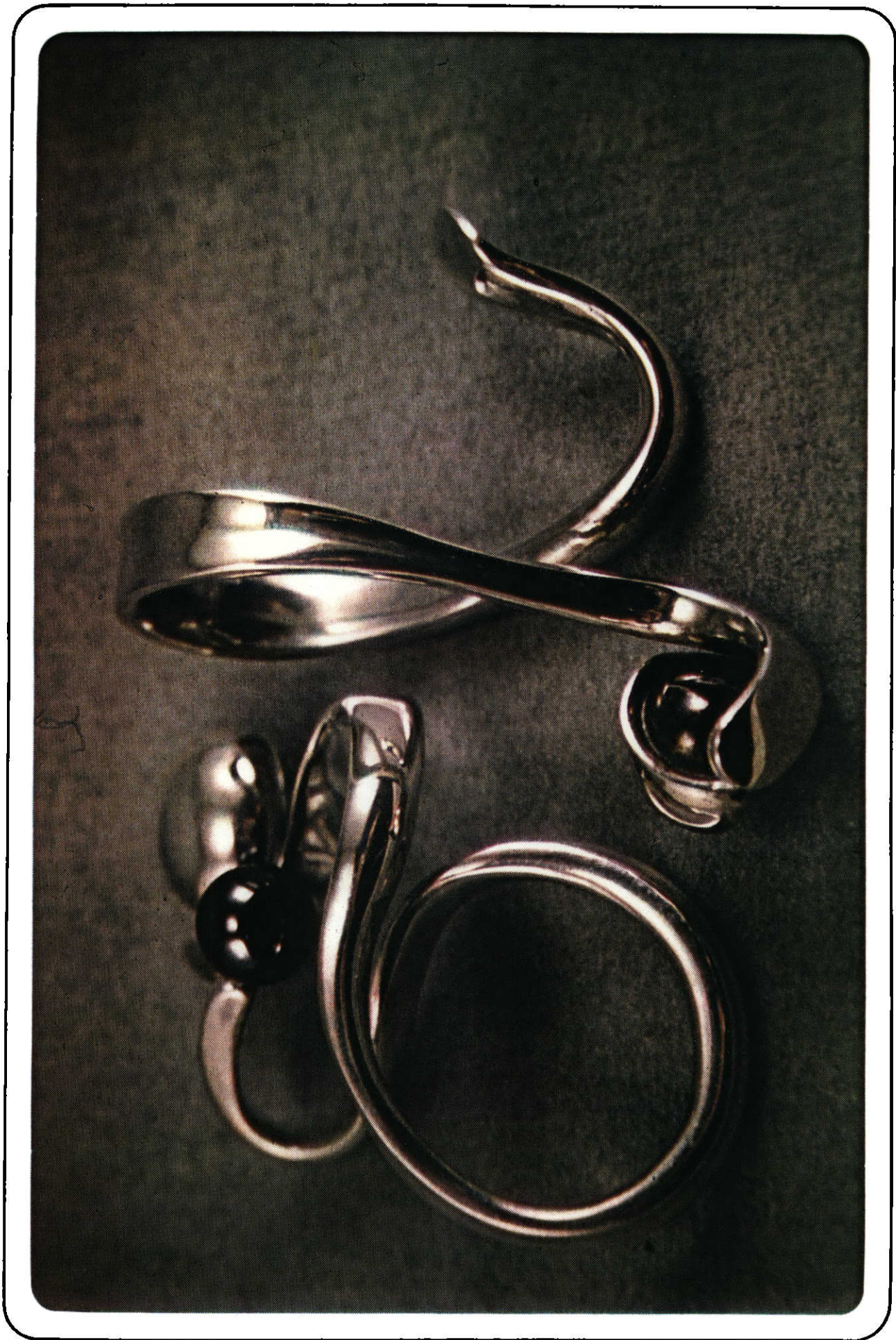


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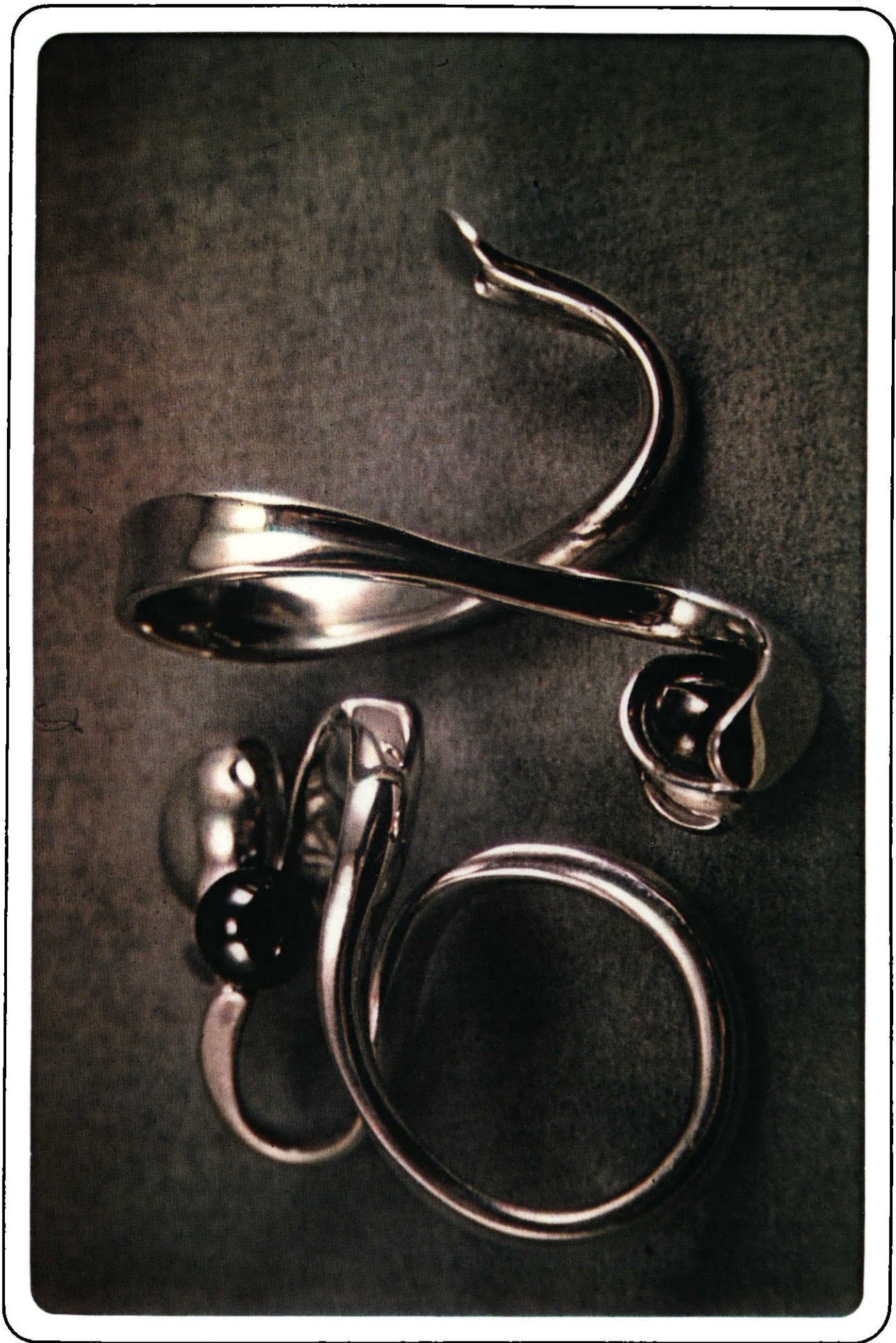


Figure 20



Figure 21



Figure 21

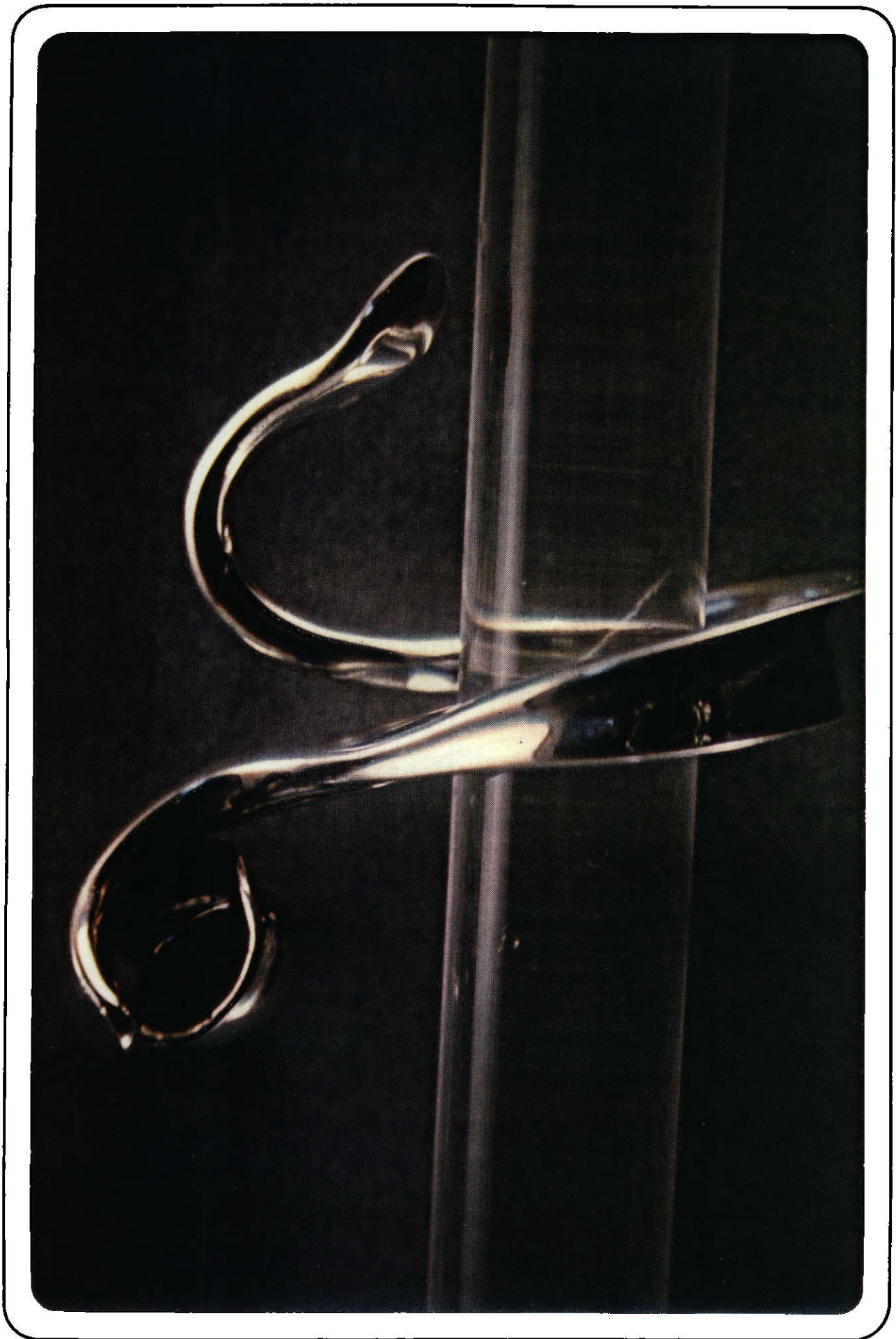


Figure 22



Figure 22



Figure 23

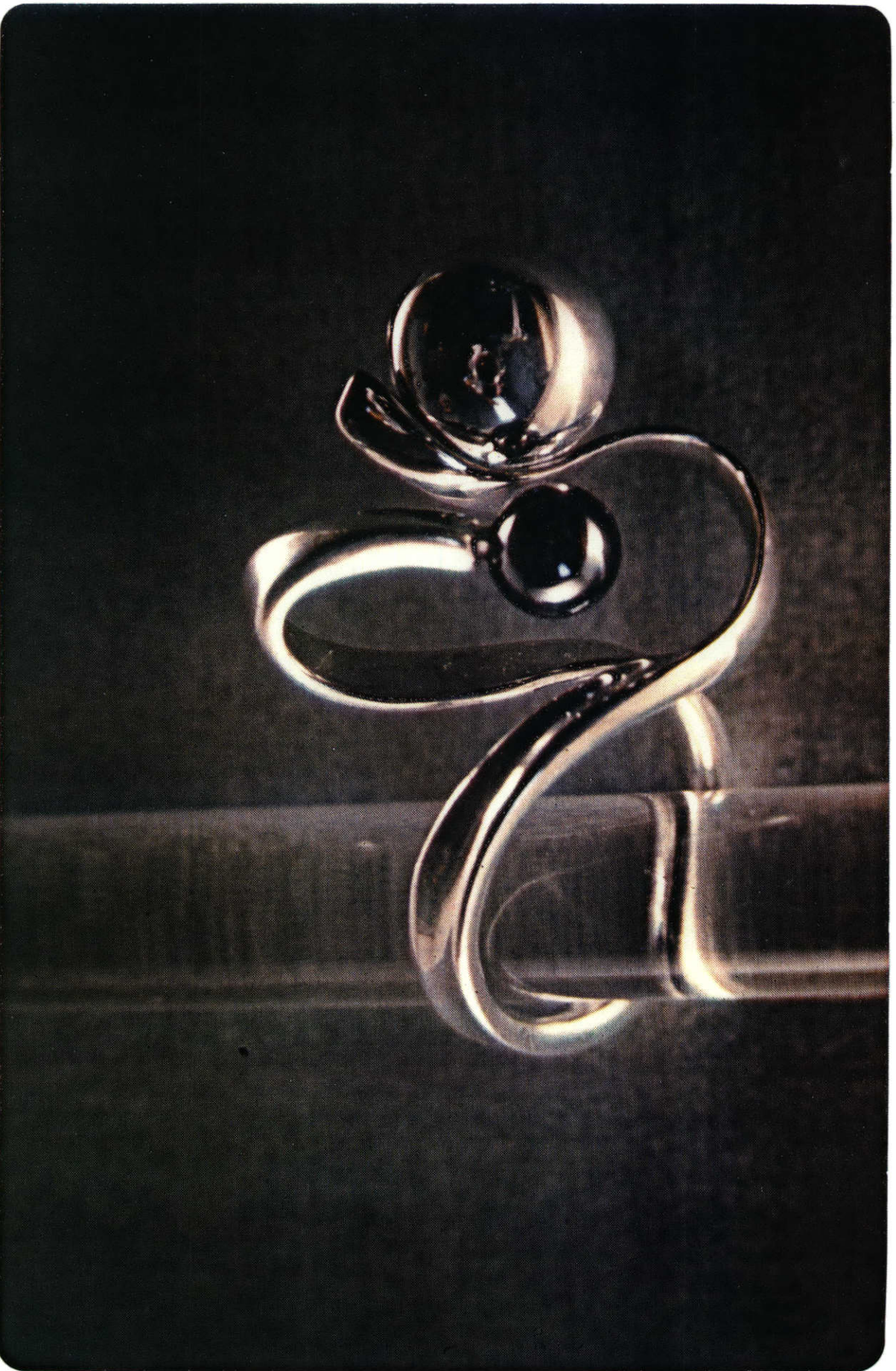


Figure 23

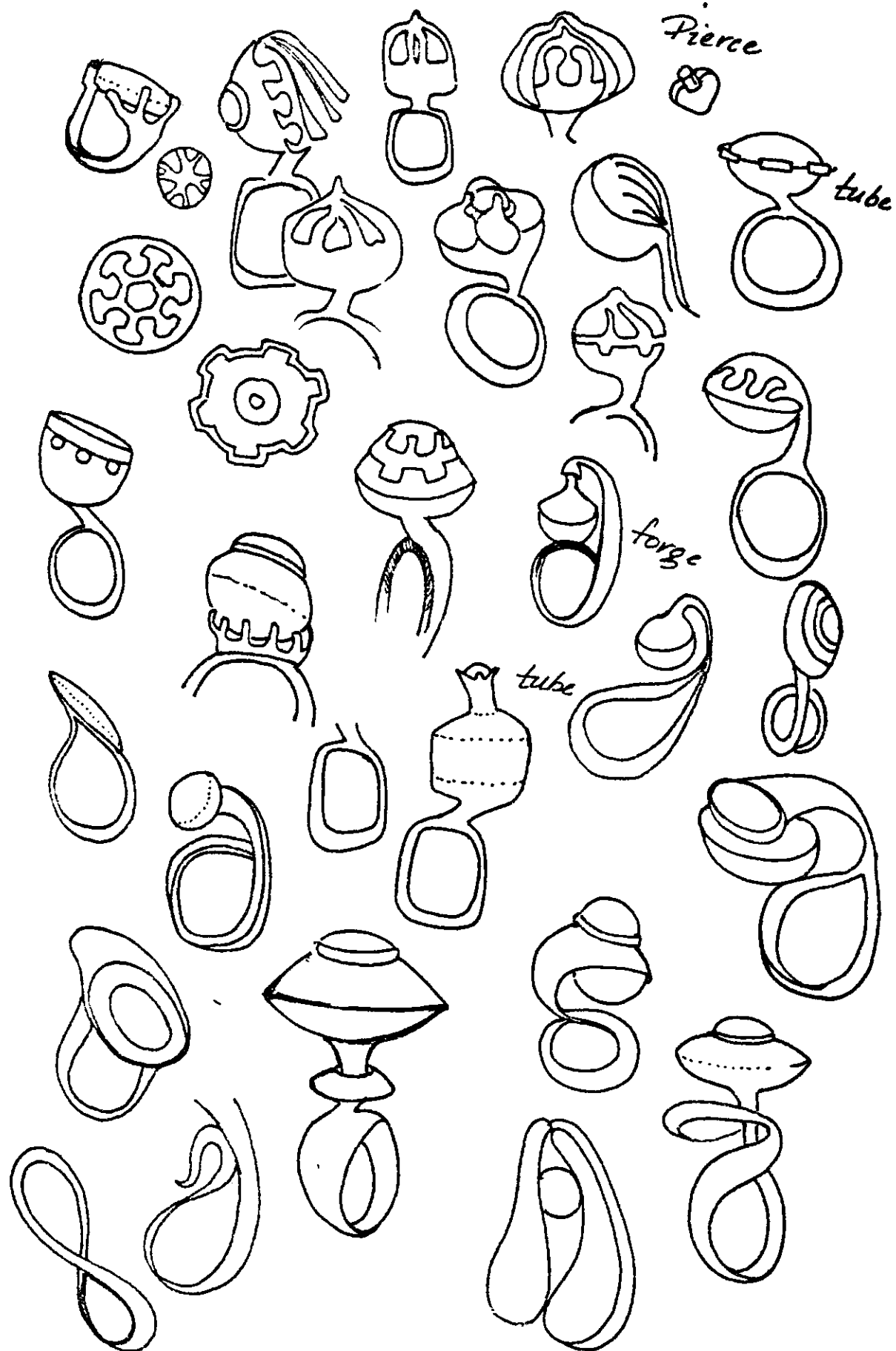


Figure 24

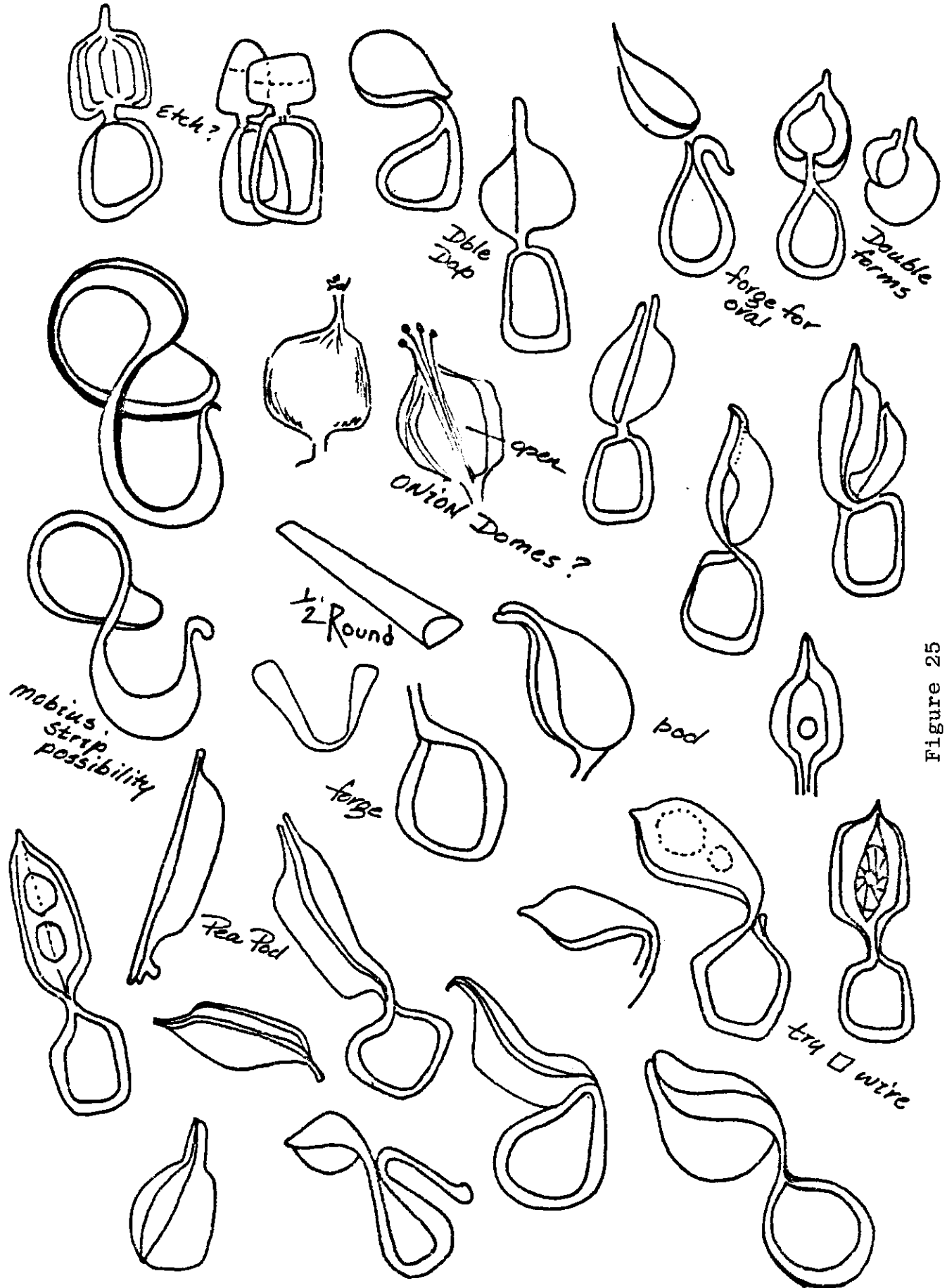


Figure 25